which the following is a summary: Pain is produced by strong excitations. All abnormal states provoke pain. The persistent memory of a painful excitation is one of the fundamental characteristics of pain. Pain is in relation with the finality of beings; this is the only psychological preventative defense. Living beings divide themselves into two groups as to preventative defense against dangers. Some fortify themselves by instinct; they have not painful sensations, and they are not able to modify their acts in the face of the unexpected. Others fortify themselves by intelligence. They have the comprehension of pain and have no wish to expose themselves to it. To suppress pain and its recollection would be to reduce human consciousness almost to nothingness. MITCHELL.

PARALYTIC INFLUENCE OF ATROPINE UPON THE GLUCOSECRETORY NERVES OF THE LIVER.

Cavazzini and Soldaini conclude their experimental researches as follows: That atropine exerts a paralyzing action upon the nerves of the cœliac plexus; that these regulate the production of sugar in the liver; that the production of glucose must be regarded as a true secretion, and the corresponding nerve fibres must be regarded as the true glyco-secretory fibres. KRAUSS.

NEURO-PATHOLOGY.

TWO CASES OF CONGENITAL, SPASTIC RIGIDITY (LITTLE'S DISEASE) WITH AUTOPSY. Comptes Rendus Hebdomadaires des Séances de la Société de Biologie, March 31, 1897. By J. Dejerine.

Case 1. The patient had been born at term and had been paretic in the lower extremities since early infancy. When examined at the age of seventy-nine he presented spastic paraplegia of moderate intensity without atrophy, and was able to walk with a cane. The patellar reflex was exaggerated. The upper limbs and face were not affected. Sensation and the action of the sphincters were normal. Intelligence was of the average degree. Since infancy the patient had been subject to epileptic attacks. There was a cavity in each hemisphere which communicated with the lateral ventricle; the one on the right side was situated at the junction of the middle and lower thirds of the fissure of Rolando, while the one on the left was at the junction of the superior and middle thirds of the corresponding fissure. The convolutions converged toward the crateriform depressions. There was no degeneration of the cerebral peduncles or any part of the oblongata or cord. In the lateral columns of the cord and in the pyramids there was an overgrowth of the neuroglia, which may have been due to the advanced age of the patient.

Case 2. The patient was born at term and was said to have presented rigidity at birth. The first years of life were passed in bed, but about the age of nine or ten the arms began to be less stiff, and the patient was able to walk with crutches. There were no epileptic attacks in this case. At the age of forty-four the intelligence was below the normal, and there was spastic paralysis of all four limbs, more marked in the lower, and especially on the left side. The left lower limb was smaller than the right. The patellar reflexes, especially the left, were exaggerated, and ankle clonus was observed on the left side. The power of movement was slight in the lower limbs, and walking was only possible with crutches. The man walked as if without joints (*tout d'une pièce*) in swinging the lower limbs. The arms could be moved more freely, but still very imperfectly, and the left was atrophied. The olecranon reflexes were exaggerated, and the contractures were greater in the left limb. Sensation and the sphincters were not affected.

There were no lesions of the cortex or central gray masses, though the cord was smaller than is normal in adults. The anterolateral columns of the cord were smaller, but the posterior appeared to be normal, as viewed by the microscope, except at one part to be mentioned. The left anterior horn was a little smaller than the right. The motor cells were equally numerous on the two sides and appeared as in normal cords. Between the first and second cervical segments there was a circumscribed lesion. The posterior horns at this level were destroyed and replaced by sclerotic tissue extending into the lateral columns and containing numerous vessels. There were also many thickened vessels in the posterior columns, but no sclerotic tissue. Ascending degeneration was not observed in the posterior columns, but the pyramidal tracts presented retrograde and descending degeneration.

Dejerine states that this second case demonstrates that the symptoms of Little's disease may be due to a primary, focal, spinal lesion, which has developed during the intrauterine period, and is possibly the result of an infectious process. The sclerosis and agenesis of the crossed pyramidal tracts were probably due to this focal lesion. The explanation for the predominance of the symptoms in the lower limbs is not easily found. SPILLER.

MOTOR AND SENSORY APHASIA.

Mantle (British Med. Jour., Feb. 6, 1897) reports two cases of aphasia that seem to merit rather complete notice. The first especially is interesting and instructive.

The patient was an artist; there was a suspicion of syphilis, but no positive evidence of it.

At the age of 31 he suffered from several slight epileptic convulsions, and after one of them was paralyzed on the right side and was aphasic, but recovered completely in 14 weeks except that some slight weakness of the leg remained. A year later he had a similar but less pronounced attack. He completely recovered from this and went back to work, but suffered from headache. At the age of 41 he awoke one morning perfectly conscious, but speechless. Examination the same evening disclosed complete motor aphasia with slight weakness of the right side of the body. He could write correctly, but was emotional and easily excited. He gradually became drowsy and the hemiplegia became complete. There was gradual improvement up to the 11th week, when in the course of three days he became totally deaf, blind and dysphagic; the pupils reacted to light and the optic fundi were normal. He remained deaf and blind for ten days, but could recognize his wife and the nurse by touch. He gradually regained sight and hearing, and what is peculiar, could at first recognize sounds at a distance (the barking of a dog, a piano in the adjoining house), but not near by. This fact was recognized by the patient and he inquired about it by writing on the coverlet with his finger. It was now found that he had right hemiopia, and could recognize whispered words, but not those spoken in a loud voice. After ten days of improvement he again became entirely blind and deaf, and communicated with others like a blind, uneducated deaf-mute, but it is worthy of remark that he retained the conception of color and form; e. g., to express his wish for milk and soda he pointed to the sheet to indicate white and drew the form of a siphon in the air with his finger. To indicate a chop he drew the form of it in the same way, and likewise indicated that he wished some lilies of the valley placed in his hand. After a few days sight returned, although he remained hemiopic, he was able to speak somewhat, and motion in the extremities improved but they were very sensitive to touch. He now again understood a few whispered words. As hearing improved it was found to be